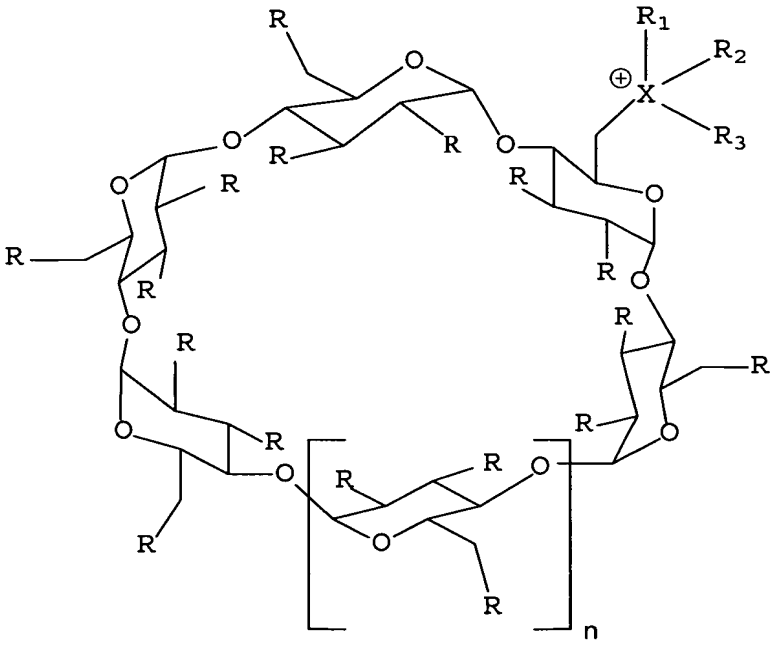
AMENDMENTS TO THE CLAIMS:

Claims 1-40 are pending. Claims 1, 4, 7, 9, 13-21 and 24-30 are amended herein. Claims 31-40 and added herein. This listing of claims will replace all prior versions, and listings of claims, in the application.

LISTING OF CLAIMS:

1. (Currently amended) A cationic oligomer of a saccharide of the general formula (I):



(I)

wherein:

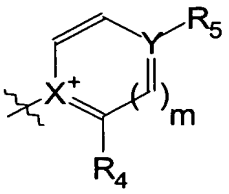
n = 0 to 8;

X is nitrogen or ~~phosphorous~~ phosphorus;

R is a hydroxyl, an ester, a carbamate, a carbonate, a phosphinate, a phosphonate, a phosphate, a sulfinate, a sulfite, a sulfonate, a sulphate, or R'O-, wherein R' is linear or branched (C_1-C_{20})alkyl, hydroxy(C_1-C_{20})alkyl, carboxy(C_1-C_{20})alkyl, aryl, or aryl(C_1-C_{20})alkyl; and

R_1, R_2 and R_3 are each independently selected from the group consisting of hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, and cycloalkyl; or

R_1 is absent, and R_2 and R_3 are taken together with X to form a ring having the following structure:



wherein m = 0 or 1;

Y is carbon or nitrogen;

R_4 is hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, or cycloalkyl; and

R_5 is hydrogen, 2-(2-ethoxyethoxy)ethyl, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, cycloalkyl, or NR_6R_7, wherein R_6 and R_7 are each independently selected from the group consisting of hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, and cycloalkyl.

2. (Original) The cationic oligomer of a saccharide according to claim 1, wherein R_1, R_2 and R_3 are each independently selected from the group consisting of hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, and cycloalkyl.

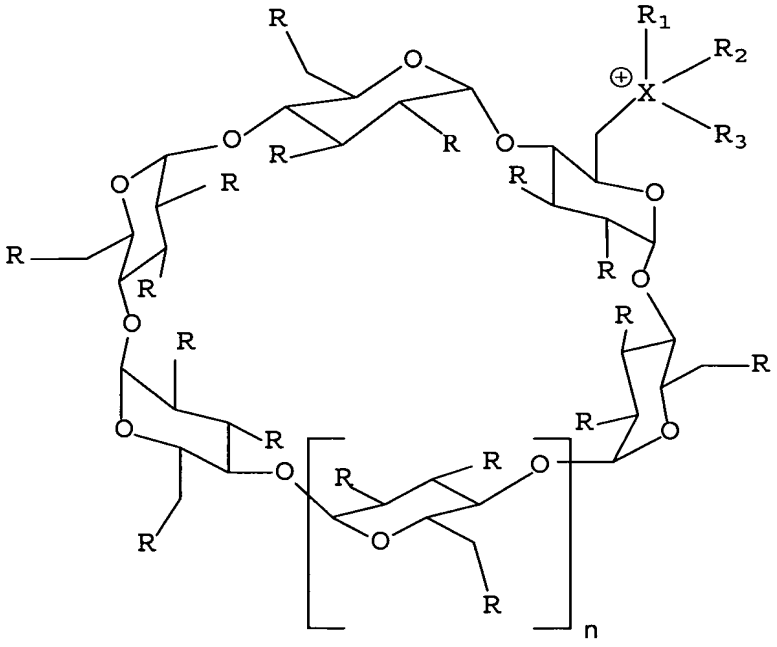
3. (Original) The cationic oligomer of a saccharide according to claim 2, wherein X is nitrogen.

4. (Currently amended) The cationic oligomer of a saccharide according to claim 2, wherein X is ~~phosphorous~~ phosphorus.

5. (Original) The cationic oligomer of a saccharide according to claim 1, wherein R_1 is absent, R_2 and R_3 form a ring, X is nitrogen, Y is nitrogen, and m is 0.

6. (Original) The cationic oligomer of a saccharide according to claim 1, wherein R_1 is absent, R_2 and R_3 form a ring, X is nitrogen, Y is carbon, and m is 1.

7. (Currently amended) A cationic oligomer of a saccharide of the general formula (I):



(I)

wherein:

n = 0 to 8;

X is nitrogen or ~~phosphorous~~ phosphorus;

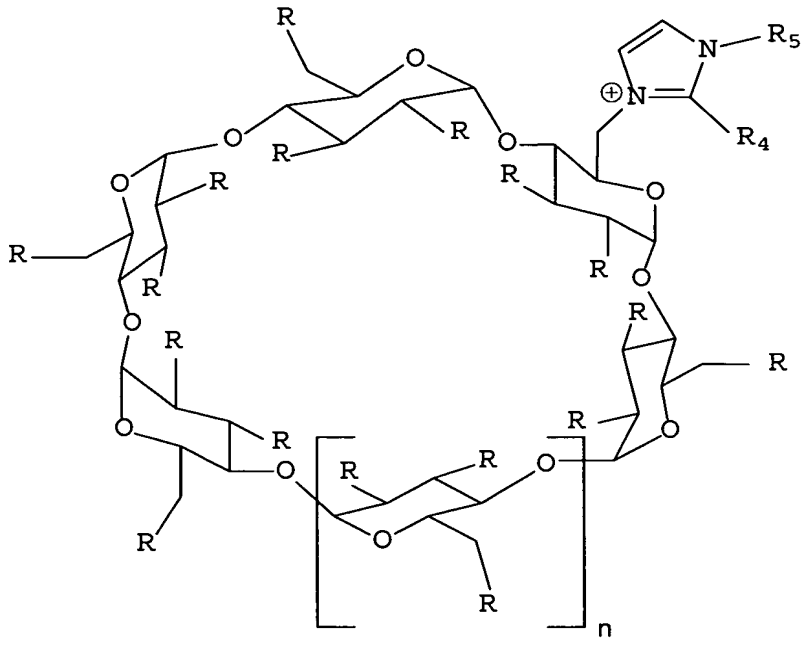
R is a hydroxyl, an ester, a carbamate, a carbonate, a phosphinate, a phosphonate, a phosphate, a sulfinate, a sulfite, a sulfonate, a sulphate, or R'O-, wherein R' is linear or branched (C_1-C_{20})alkyl, hydroxy(C_1-C_{20})alkyl, carboxy(C_1-C_{20})alkyl, aryl, or aryl(C_1-C_{20})alkyl; and

R_1, R_2 and R_3 are each independently selected from the group consisting of hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, and cycloalkyl.

8. (Original) The cationic oligomer of a saccharide according to claim 7, wherein X is nitrogen.

9. (Currently amended) The cationic oligomer of a saccharide according to claim 7, wherein X is ~~phosphorous~~ phosphorus.

10. (Original) A cationic oligomer of a saccharide of the general formula (II)



(II)

wherein

n = 0 to 8;

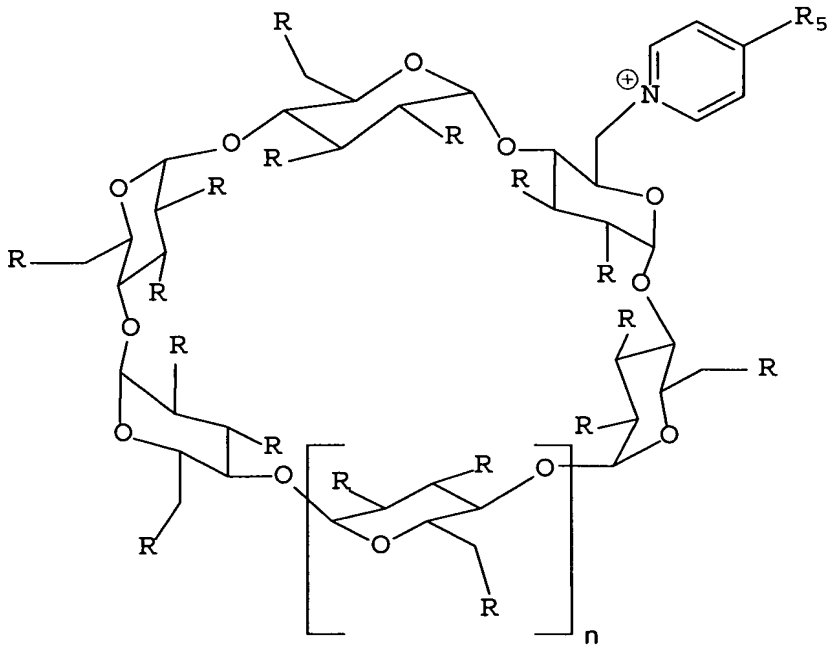
R is a hydroxyl, an ester, a carbamate, a carbonate, a phosphinate, a phosphonate, a phosphate, a sulfinate, a sulfite, a sulfonate, a sulphate, or R'O-, wherein R' is linear or branched chain (C_1-C_{20})alkyl, hydroxy(C_1-C_{20})alkyl, carboxy(C_1-C_{20})alkyl, aryl, or aryl(C_1-C_{20})alkyl;

R_4 is hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, or cycloalkyl; and

R_5 is hydrogen, 2-(2-ethoxyethoxy)ethyl, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, or cycloalkyl.

11. (Original) The cationic oligomer of a saccharide according to claim 10, wherein R_4 is hydrogen or methyl.

12. (Original) A cationic oligomer of a saccharide of the general formula (III)



(III)

wherein

n = 0 to 8;

R is a hydroxyl, an ester, a carbamate, a carbonate, a phosphinate, a phosphonate, a phosphate, a sulfinate, a sulfite, a sulfonate, a sulphate, or R'O-, wherein R' is linear or branched (C_1-C_{20})alkyl, hydroxy(C_1-C_{20})alkyl, carboxy(C_1-C_{20})alkyl, aryl, or aryl(C_1-C_{20})alkyl; and

R_5 is hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, cycloalkyl, or NR_6R_7, wherein R_6 and R_7 are each independently selected from the group consisting of hydrogen, linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, and cycloalkyl.

13. (Currently amended) The cationic oligomer of a saccharide ~~according to any one of claims 1 to 12~~ of claim 1, wherein n is 1, 2, or 3.

14. (Currently amended) The cationic oligomer of a saccharide ~~according to any one of claims 1 to 13~~ of claim 1, further comprising a counterion.

15. (Currently amended) The cationic oligomer of a saccharide ~~according to~~ of claim 14, wherein the counterion is fluoride, chloride, bromide, iodide, nitrate, HCO_3^-, CO_3^{2-}, HSO_4^-, BF_4^-, BCl_4^-, PF_6^-, SbF_6^-, AsF_6^-, $AlCl_4^-$, R_9-CO_2^- or R_9-SO_3^-, wherein R_9 is linear or branched (C_1-C_{20})alkyl, linear or branched (C_1-C_{20})alkenyl, linear or branched (C_1-C_{20})alkynyl, cycloalkyl, or aryl(C_1-C_{20})alkyl.

16. (Currently amended) A method of preparing a cationic oligomer of a saccharide as defined in ~~any one of claims 1 to 15~~ claim 1, comprising reacting an amine, a phosphine, an imidazole, or a pyridine with [[a]] an oligomer of [[a]] the saccharide having a leaving group.

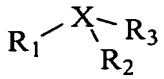
17. (Currently amended) The method ~~according to~~ of claim 16, wherein the leaving group is a halide, a mesylate, a tosylate, a triflate, or a haloformate ester group.

18. (Currently amended) The method ~~according to~~ of claim 17, wherein the halide is an iodide, bromide, or chloride.

19. (Currently amended) The method ~~according to any one of claims 16 to 18~~ of claim 16, wherein the leaving group is a tosylate.

20. (Currently amended) The method ~~according to any one of claims 16 to 19~~ of claim 16, wherein the oligomer of a saccharide is mono-6-deoxy-6-tosyl cyclodextrin or mono-2-deoxy-2-tosyl cyclodextrin.

21. (Currently amended) The method ~~according to any of claims 16 to 20~~ of claim 16, wherein the amine and phosphine are

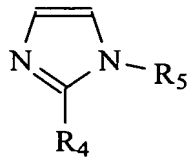


wherein R_1, R_2, and R_3 are defined as in claim 1.

22. (Original) The method of claim 21, wherein X is nitrogen.

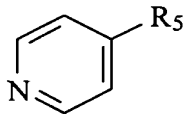
23. (Original) The method of claim 21, wherein X is phosphorous.

24. (Currently amended) The method ~~according to any one of claims 16 to 20~~ of claim 16, wherein the imidazole is



wherein R_4 and R_5 are defined as in claim 1.

25. (Currently amended) The method ~~according to any one of claims 16 to 20~~ of claim 16, wherein the pyridine is



wherein R_5 is defined as in claim 1.

26. (Currently amended) ~~Use~~ A method for enantiomeric separation of a mixture of racemates, comprising:

providing ~~of~~ a cationic oligomer of a saccharide as defined in ~~any of claims 1 to 15~~ claim 1 as a chiral agent;

mixing the cationic oligomer of the saccharide with the mixture of racemates; and ~~for an enantiomeric separation~~ enantioseparating the racemates by a chromatographic method.

27. (Currently amended) The ~~use~~ method of claim 26, wherein the chromatographic method is selected from the group consisting of gas chromatography (GC), liquid chromatography (LC), high performance liquid chromatography (HPLC), capillary electrophoresis (CE), and sub or supercritical fluid chromatography (SFC).

28. (Currently amended) ~~Use of~~ A method for asymmetric synthesis of a compound, comprising:

providing a cationic oligomer of a saccharide as defined in ~~any of claims 1 to 15~~ claim 1 as a chiral agent; and

performing the ~~for an~~ asymmetric synthesis reaction in the presence of the chiral agent.

29. (Currently amended) The ~~use~~ method of claim 28, wherein the asymmetric synthesis is a reduction or a pericyclic reaction.

30. (Currently amended) The ~~use~~ method of claim 29, wherein the pericyclic reaction is an ene or a Diels Alder reaction.

31. (New) The cationic oligomer of a saccharide of claim 10, wherein n is 1, 2, or 3.

32. (New) The cationic oligomer of a saccharide of claim 12, wherein n is 1, 2, or 3.

33. (New) The cationic oligomer of a saccharide of claim 10, further comprising a counterion.

34. (New) The cationic oligomer of a saccharide of claim 12, further comprising a counterion.

35. (New) A method of preparing a cationic oligomer of a saccharide as defined in claim 10, comprising reacting an amine, a phosphine, an imidazole, or a pyridine with an oligomer of the saccharide having a leaving group.

36. (New) A method of preparing a cationic oligomer of a saccharide as defined in claim 12, comprising reacting an amine, a phosphine, an imidazole, or a pyridine with an oligomer of the saccharide having a leaving group.

37. (New) A method for enantiomeric separation of a mixture of racemates, comprising:
providing a cationic oligomer of a saccharide as defined in claim 10 as a chiral agent;
mixing the cationic oligomer of the saccharide with the mixture of racemates; and
enantioseparating the racemates by a chromatographic method.

38. (New) A method for enantiomeric separation of a mixture of racemates, comprising:
providing a cationic oligomer of a saccharide as defined in claim 12 as a chiral agent;
mixing the cationic oligomer of the saccharide with the mixture of racemates; and
enantioseparating the racemates by a chromatographic method.

39. (New) A method for asymmetric synthesis of a compound, comprising:
providing a cationic oligomer of a saccharide as defined in claim 10 as a chiral agent; and
performing the asymmetric synthesis reaction in the presence of the chiral agent.

40. (New) A method for asymmetric synthesis of a compound, comprising:
providing a cationic oligomer of a saccharide as defined in claim 12 as a chiral agent; and
performing the asymmetric synthesis reaction in the presence of the chiral agent.